

REMARKS

Applicants thank the Examiner for his courteous and helpful suggestions for amending the drawings during the interview held on January 29, 2003, as described in the interview summary (Paper No. 10). Accordingly, applicants have amended FIGS. 2 and 3 and added a new drawing, FIG. 3A, as set forth in the attached Request for Approval of Drawing Changes.

The changes to FIG. 2 reflect the detailed structure of the slide platen 11 disclosed in FIG. 2 and related descriptions on page 5, line 30 - page 6, line 13 of the specification. The new drawing, FIG. 3B, is a schematic plan view of the high-speed electronic component feeding apparatus 1. In other words, FIG. 3B is a plan view of the structure shown in the perspective drawing of FIG. 2. While FIG. 2 shows the main body 2 merely as a box to indicate its position relative to the slide platen 11, FIG. 3B includes some more details of the main body, such as the rotating table 7 and the mounting head 8, and also includes slide bases 12 that are transported to the center of the slide platen 11 for component pick-up. The specification supports the configuration of the rotating table 7 and mounting head 8 shown in FIG. 3B by stating "The main body 2 includes an index unit 6 as a main portion of a driving system, a rotating table 7, and a plurality of mounting heads 8 (12 in this embodiment) placed at the outer portion of the rotating table 7" (page 4, lines 29-31). The specification also supports the position of the slide bases 12 by stating "During the operation, the two pairs of the slide bases 12 with each slide base 12 carrying a group of tape cassettes 13 come to the main body 2 alternatively" (page 5, lines 10-12). The components shown in FIG. 3 reflect their sizes shown in FIG. 1, rather than those of the schematic drawing of FIG. 2. FIG. 3 is redesignated as FIG. 3A to accommodate the addition of FIG. 3B.

Applicants have amended the specification to reflect the changes to the drawings described above and to add reference numeral 1, which was missing from the specification as described by the Examiner.

During the interview all the issues that caused the Examiner to object to the drawings and the specification were resolved, as described in the interview summary. Accordingly, these objections are overcome with the amendment to the drawings and specification described above.

Claims 7 and 8 have been rejected under 35 USC 112, first paragraph, as containing subject matter which was not described in the specification, and further rejected under 35 USC 112, second paragraph, as being indefinite. During the interview the Examiner understood that the claimed invention is indeed described in the specification and the claims are not indefinite. In particular, the Examiner understood that the structure of the slide base 12, including all its elements, is described on page 5, line 30 - page 6, line 13, that the structure of the slide platen 11 is described on page 6, line 28 - page 7, line 2, and that the structure of the linear motor 14 is described on page 7, lines 3-23. Accordingly, these rejection should be withdrawn.

Claims 7 and 8 have been rejected under 35 USC 103(a) as being unpatentable over Japanese Laid-open Patent Publication No. S61-239696 (Itagaki) in view of U.S. Patent No. 6,118,468 (Ando). This rejection is respectfully traversed.

Claim 7 includes the feature that a heat dissipation portion is formed on the unit base for dissipating the heat in the moving member. Itagaki's apparatus does not include the heat dissipation portion, as the Examiner admits. Ando teaches a thermal head of a printer, which may have a heat dissipation block, but does not teach or suggest that the heat dissipation block is formed on a unit base that is connected to a moving member of a linear motor. Accordingly,

Itagaki and Ando do not teach or suggest the claimed invention as a whole. Thus, the rejection of claims 7 and 8 under 35 USC 103(a) should be withdrawn.

In light of the above, a Notice of Allowance is solicited.

Attached hereto is a marked-up version of the changes made to the specification by this amendment, captioned "Version with markings to show changes made".

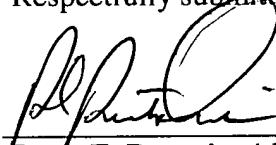
In the event that the transmittal letter is separated from this document and the Patent and Trademark Office determines that an extension and/or other relief is required, applicants petition for any required relief including extensions of time and authorize the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to

Deposit Account No. 03-1952, referencing Docket No. 492322002100.

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the specification:

Correct the paragraph beginning at page 3, line 33 as follows:

Fig. 3A is an expanded cross-sectional view of the electronic component feeding apparatus [as] of the first embodiment of this invention, and FIG. 3B is a plan view of a high speed electronic component mounting instrument including the electronic component feeding apparatus.

Correct the paragraph beginning at page 4, line 20 as follows:

Fig. 1 is a side view of a high-speed electronic component mounting instrument 1, and Fig. 2 is a perspective external view of the feeding constituent of the mounting instrument. As seen from both figures, the high-speed electronic component mounting instrument consists of an apparatus main body 2, a feeding portion 3 for feeding electronic components A, and a mounting portion 4 for mounting electronic components A to print board B, in such a way that the feeding portion 3 and the mounting portion 4 are aligned parallel along the main body 2, having the main body 2 in between. The feeding portion 3 includes an apparatus for feeding electronic components as shown in the figures.

Correct the paragraph beginning at page 5, line 3 as follows:

The feeding portion 3, which is basically the apparatus for feeding the electronic components, includes a slide platen 11 with its longitudinal direction being perpendicular to the plane of the figures (Fig. 1 and Fig. 3A), four slide bases (unit bases) 12 mounted on the slide platen 11 for sliding thereon, a plurality of tape cassettes (component feeding unit) 13 detachably mounted on the slide base 12, and a linear motor 14 placed between the slide platen 11 and each slide base 12.

Correct the paragraph beginning at page 5, line 9 as follows:

As shown in Fig. 2, among the four slide bases 12, one pair of the slide bases 12 rests at one end of the slide platen 11 and another pair rests at the other end. During the operation, the two pairs of the slide bases 12 with each slide base 12 carrying a group of tape cassettes 13 come to the main body 2 alternatively. While one pair with each slide base 12 carrying a group of tape cassettes 13 moves (slides) to the position of the main body 2 and rests there for component feeding operation, another pair is at the home position (one end of the slide platen) for changing the tape cassettes 13 in preparation for the next feeding operation. Fig. 2 schematically shows the pair of slide bases 12 without groups of tape cassettes 13 and the position of the main body 2 relative to the slide platen 11.

Correct the paragraph beginning at page 5, line 9 as follows:

As seen from and Fig. 3A, each tape cassette 13 is designed to be thin so that a group of the tape cassettes 13 can be mounted on the upper surface of the slide base 12 being laterally oriented (perpendicular to the longitudinal direction of the slide platen) with a narrow space among them. Each tape cassette 13 has its designated position on the upper surface of the slide base 12 and can easily be attached to or detached from the position by a simple lever operation. The mounting head 8 (suction nozzle 9) of the apparatus main body 2 comes to the opposite end of the tape cassette 13 mounted on the slide base 12 to the tape reel 16 for picking up the electronic component A. The tape cassette 13 has carrier tape C with electronic components A being contained therein at a predetermined pitch, which is wound to a tape reel 16. The electronic components A are picked up one by one by the suction nozzle 9 from the carrier tape C, which is unreeled from the tape reel 16. Fig. 3B is a schematic plan view of the high-speed electronic component mounting instrument 1 to show the position of the slide platen 11 relative

to the main body 2.